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Date 4/8/2004 Signature Adam J. Forman
Adam J. Forman

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Kyle A. Brownell, et al.
Serial No.: 10/090,040
Filed: 03/01/2002
Examiner: Robert A. Hopkins
Group Art Unit: 1724
Docket No.: 410193.90155
Title: *Two Stage Air Filter*

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MAY 26 2004
TC 1700

**SUPPLEMENTAL INFORMATION DISCLOSURE
STATEMENT PURSUANT TO 37 CFR 1.97**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.97-1.98, Applicant is submitting a listing of documents on Form PTO-1449. A copy of each document is enclosed.

Pursuant to MPEP §609, the submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any rights to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Furthermore, the submission of the listed document does not imply that Applicant has performed an in-depth review of each document. Applicant has, however, performed a cursory review the listed references and, based on Applicant's limited knowledge of the prior art, the references of highest relevance among the list appear to include A) Fitch (WO 02/070105 and 2004/11,203); and Frazier (4,604,110 and 4,534,775).

Applicant is not commenting on the relevance of the other references, and further is not discharging the duty of the Examiner to review the cited references and draw his own conclusions regarding the degree of relevance of each reference with respect to the pending claims.

This information disclosure statement is being filed before the mailing of a first Office Action after the filing of a Request for Continued Examination, pursuant to 37 CFR 1.97(b)(4). Should there be any charges involved, please charge Deposit Account No. 17-0055.

Applicant respectfully requests that the listed documents be considered by the Examiner, be made of record in the present application, and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

Respectfully submitted,

Thomas A. Benson

By: Adam J. Forman
Adam J. Forman
Reg. No. 46,707
Attorney for Applicant
Quarles & Brady
411 E. Wisconsin Avenue, Suite 2040
Milwaukee WI 53202-4497
(414) 277-5405

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 5

Complete if Known

Application Number	10/090,040
Filing Date	March 1, 2002
First Named Inventor	Brownell, et al.
Art Unit	1724
Examiner Name	Robert A. Hopkins
Attorney Docket Number	410193.90155

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- RE 34,636	06/14/1994	Bivens	RECEIVED MAY 26 2004 TC 1700
		US- 3,970,558	07/20/1976	Lee	
		US- 4,082,661	04/04/1978	Aoki et al.	
		US- 4,104,163	08/01/1978	Grutsch	
		US- 4,118,206	10/03/1978	Hagendoorn	
		US- 4,172,031	10/23/1979	Hall et al.	
		US- 4,177,142	12/04/1979	Halbfoster	
		US- 4,231,768	11/04/1980	Seibert et al.	
		US- 4,238,334	12/09/1980	Halbfoster	
		US- 4,328,105	05/04/1982	Arbuckle	
		US- 4,485,622	12/04/1984	Takagi et al.	
		US- 4,595,509	06/17/1986	Fox et al.	
		US- 4,645,605	02/24/1987	Durham	
		US- 4,721,624	01/26/1988	Schumann	
		US- 4,805,525	02/21/1989	Bivens	
		US- 4,816,499	03/28/1989	Nomura et al.	
		US- 4,908,050	03/13/1990	Nagashima et al.	
		US- 5,003,693	04/02/1991	Atkinson et al.	
		US- 5,154,743	10/13/1992	Takato et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
		GB 1.014.594	12/31/1965	Orlo Clair Norton		
		GB 1,255,268	12/01/1971	US Atomic Energy Comsn		
		DD 74,699	07/12/1970	Karl Winter		
		EP 1,238,679	09/11/2002	ENEA		
		WO 02/070105A2	09/12/2002	Johnson, James R.		

Examiner
Signature

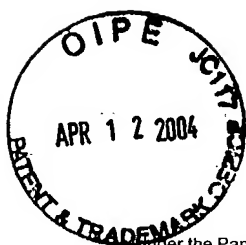
Date
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/090,040
		Filing Date	March 1, 2002
		First Named Inventor	Brownell, et al.
		Art Unit	1724
Examiner Name	Robert A. Hopkins	TC 1700	
Attorney Docket Number	410193.90155		
Sheet	2	of	5

OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		G. Elliott et al, "The increasing Use of Ceramic Filters in Air Pollution Control Applications," Filtr. Sep. Vol. 34 No. 4 pp. 331-335, 1997, Elsevier Science Ltd.	
		N. Singh et al., "Precass Design and Economic Analysis of a Ceramic Membrane System for Microfiltration of Com Starch Hydrolysate," Journal of Food Engineering, Vol 38, No. 1, pp. 57-67, 1998, Elsevier Science Ltd.	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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(use as many sheets as necessary)

Sheet	3	of	5
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U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		5,776,354		van der Meer et al.	07/07/1998	
		5,810,895		Staehle et al.	09/22/1998	
		5,997,618		Schneider et al.	12/07/1999	
		6,010,558		Ackland	01/04/2000	
		6,077,335		Schneider et al.	06/20/2000	
		6,077,800		Takahashi et al.	06/20/2000	
		6,095,037		Savage et al.	08/01/2000	
		6,168,651		Tuma et al.	01/02/2001	
		6,340,379		Penth et al.	01/22/2002	
		6,432,177		Dallas et al.	08/13/2002	
		6,464,770		Palm et al.	10/15/2002	
		5,776,354		van der Meer et al.	07/07/1998	
		5,700,973		Siddiqui	12/23/1997	
		4,485,622		Takagi et al.	12/04/1984	
		5,632,889		Tharp	05/27/1997	
		6,605,648		James R. Johnson	08/12/2003	
		5,750,026		Gadkaree et al.	05/12/1998	
		5,766,458		Sekhar et al.	06/16/1998	
		4,388,086		Bauer et al.	06/14/1983	
		4,350,504		Diachuk	09/21/1982	

[illegible]

Date Considered

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 4 of 5

Complete if Known

Application Number	10/090,040
Filing Date	March 1, 2002
First Named Inventor	Brownell, et al.
Group Art Unit	1724
Examiner Name	Robert A. Hopkins
Attorney Docket Number	410193.90155

U.S. PATENT DOCUMENTS

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		Number	Kind Code ² (if known)			
		4,126,433		Forssberg et al.	11/21/1978	
		6,641,788		Ogawa et al.	11/04/2003	
		5,145,648		Miyahara et al.	09/08/1992	
		5,976,221		Bowman et al.	11/02/1999	
		5,792,360		Alaar	08/11/1998	
		4,682,992		Fuchs	07/28/1987	
		6,074,177		Kobavashi et al.	06/13/2000	
		5,133,786		Anderson	07/28/1992	
		4,292,285		Nakao et al.	09/29/1981	
		5,145,648		Miyahara et al.	09/08/1992	
		6,010,558		Ackland	01/04/2000	
		5,628,916		Stevens et al.	05/13/1997	
		5,624,875		Nakanishi et al.	04/29/1997	
		5,567,090		Basak et al.	10/22/1996	
		5,512,088		McKenzie	04/30/1996	
		5,486,370		Bivens	01/23/1996	
		5,442,924		Tsai et al.	08/22/1995	
		5,404,799		Bivens	04/11/1995	
		5,209,887		Von Blucher et al.	05/11/1993	
		2003/0024393		Lim	02/06/2003	

FOREIGN PATENT DOCUMENTS

[illegible]

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Date	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	5
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Complete if Known

Application Number	10/090,040
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10/090.040

Filing Date	March 1, 2002
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March 1, 2002

First Named Inventor	Brownell, et al.
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Brownell, et al.

Group Art Unit	1724
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1724

Examiner Name	Robert A. Hopkins
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Robert A. Hopkins

Attorney Docket Number	410193.90155
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410193.90155

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner
Signature

Date

	Not Considered	Considered
1. The number of people who are affected by the problem.		
2. The severity of the problem.		
3. The likelihood of the problem occurring.		
4. The cost of the problem.		
5. The time it takes to solve the problem.		
6. The complexity of the problem.		
7. The availability of resources to solve the problem.		
8. The potential for future problems.		
9. The impact of the problem on the organization's reputation.		
10. The impact of the problem on the organization's financial performance.		
11. The impact of the problem on the organization's legal obligations.		
12. The impact of the problem on the organization's ethical standards.		
13. The impact of the problem on the organization's social responsibilities.		
14. The impact of the problem on the organization's environmental sustainability.		
15. The impact of the problem on the organization's overall success.		

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